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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

n re patent application of:	)	Before the Examiner
David A. Schleppenbach et al.	)	
Serial No.: 10/748,742	)	Group Art Unit 3713
Filed: December 30, 2003	)	
APPARATUS AND METHODS FOR A SHAPE MEMORY SPRING	) ) )	
ACTUATOR AND DISPLAY	)	August 13, 2004

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to the duty of disclosure embodied in 37 C.F.R. § 1.56, Applicants wish to bring to the attention of the Examiner the items of information listed on the enclosed PTO forms 1449 A & B. This information was previously submitted in the parent application, (Serial No. 09/040,871, now issued as U.S. Patent No. 6,705,868). Copies of cited items are not enclosed.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 13, 2004.

John V. Daniluch

Signature

Date

7024-538.JVD.295377

The identified information, taken alone or in combination with other art, provides

information relating to the subject matter of the invention, but fails to teach, disclose or

suggest the present invention. The filing of this Information Disclosure Statement shall

not be construed as an admission that the information cited is, or is considered to be,

material to patentability as defined in § 1.56(b).

This Statement is being submitted under 37 C.F.R. §1.97(c)(2) more than three

months after the filing date of the application but before the mailing of the first Office

Action on the merits. No fees are believed to be due; however, if any fees are deemed to

be required, please charge such fees to Deposit Account No. 23-3030, but not to include

any payment of issue fees.

Respectfully submitted

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INFORMATION DISCLOSURE STATEMENT Serial No. 10/748,742

007024-000538.JVD.295830

AUG 1 6 2004

WEMMH/SB/08A (4/03)
Approved for use through 10/31/2002. OMB 0651-0031
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Cubatitut	o for form 1440A/E	W	PADEMARK	Complete if Known			
Substitute for form 1449A/PTO		Application Number	10/748,742				
	ORMATION			Filing Date	December 30, 2003		
STATEMENT BY APPLICANT				First Named Inventor	David A. Schleppenbach		
(use as many sheets as necessary)				Group Art Unit	3713		
				Examiner Name			
Sheet	1	of	5	Attornev Docket Number	7024-538		

	U.S. PATENT DOCUMENTS							
Examiner Cite No. 1	Document Number Number-Kind Code <sup>2</sup> (If known)	Publication Date MM-DD-YYYY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear				
		US-3,586,451	06/22/1971	Canton				
		US-3,652,173	03/28/1972	Miller et al.				
		US-3,653,777	04/04/1972	Bross				
		US-3,659,354	05/02/1972	Sutherland				
		US-3,951,554	04/20/1976	Jonkers				
		US-4,033,053	07/05/1977	Engler				
		US-4,037,200	07/19/1977	Cranmer				
		US-4,115,015	09/19/1978	Torii				
		US-4,194,190	03/18/1980	Bareau				
		US-4,266,936	05/12/1981	Rose et al.				
		US-4,283,178	08/11/1981	Tetzlaff				
-		US-4,285,039	08/18/1981	Patterson et al.				
		US-4,404,764	09/20/1983	Wills et al.				
		US-4,473,356	09/25/1984	Fernando et al.				
		US-4,500,293	02/19/1985	Eltgen				
		US-4,553,393	11/19/1985	Ruoff				
		US-4,556,934	12/03/1985	Lemme et al.				
		US-4,556,935	12/03/1985	Lemme				

Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or Application of Cited	Pages, Columns, Lines, Where Relevant Passages or Relevant	74
Initials*	No.1	Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>6</sup> (if known)	MM-DD-YYYY	Document Document	Figures Appear	
		DE 39 29 275 C1	03/14/1991			
		FR 2 718 266	10/06/1995			
		JP 5-300705	11/12/1993			
		JP 2-134674	05/23/1990			
		JP 6-227051	08/16/1994			
		JP 59-198483	11/10/1984			
		JP 61-166580	07/28/1986			

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Substitute for form 1449A/PTO				Complete if Known			
				Application Number	10/748,742		
	ORMATION			Filing Date	December 30, 2003		
ST	ATEMENT B	Y AP	PLICANT	First Named Inventor	David A. Schleppenbach		
				Group Art Unit	3713		
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Sheet	2	of	5	Attornev Docket Number	7024-538		

			U.S. PAIEN	T DOCUMENTS		
Examiner Initials*	Cite No.1	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines where Relevant Passages or Relevan	
	No.'	Number-Kind Code <sup>2</sup> (If known)	MM-DD-YYYY	Application of Cited Document	Figures Appear	
		US-4,559,512	12/17/1985	Yaeger et al.		
		US-4,571,190	02/18/1986	Zagier et al.		
		US-4,586,904	05/06/1986	Chlumsky		
		US-4,621,882	11/11/1986	Krumme		
		US-4,650,352	03/17/1987	Eriksson		
		US-4,653,942	03/31/1987	Soloveychik et al.		
-		US-4,664,632	05/12/1987	Tretiakoff et al.		
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		US-4,701,293	10/20/1987	Mead		
		US-4,707,148	11/17/1987	Richmond		
		US-4,752,772	06/21/1988	Litt et al.		
		US-4,758,165	07/19/1988	Tieman et al.		
		US-4,761,955	08/09/1988	Bloch		
		US-4,765,139	08/23/1988	Wood		
		US-4,772,205	09/20/1988	Chlumsky et al.		
		US-4,811,564	03/14/1989	Palmer		
		US-4,836,784	06/06/1989	Burchart		
		US-4,871,992	10/03/1989	Peterson		

Examiner		Foreign Patent Document	Publication Date	Name of Patentee or Application of Cited	Pages, Columns, Lines, Where Relevant Passages or Relevant	74
Initials*	No. <sup>3</sup>	Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>6</sup> (if known)	MM-DD-YYYY	Document	Figures Appear	'
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Substitute for form 1449A/PTO		Complete if Known			
		Application Number	10/748,742		
INFORMATION DISCLOSURE				Filing Date	December 30, 2003
ST	ATEMENT B	Y AP	PLICANT	First Named Inventor	David A. Schleppenbach
,				Group Art Unit	3713
(	(use as many sheets as necessary)			Examiner Name	
Sheet	3	of	5	Attornev Docket Number	7024-538

U.S. PATENT DOCUMENTS							
	Cite No.1	Document Number  Number-Kind Code <sup>2</sup> (If known)	Publication Date MM-DD-YYYY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
		US-4,898,536	02/06/1990	Hoffarth			
		US-4,932,210	06/12/1990	Julien et al.			
		US-5,040,283	08/20/1991	Pelgrom			
		US-5,070,697	12/10/1991	Van Zeggeren			
		US-5,086,287	02/04/1992	Nutzel			
		US-5,107,235	04/21/1992	Torres-Isea			
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		US-5,127,228	07/07/1992	Swenson			
		US-5,165,897	11/24/1992	Johnson			
		US-5,186,629	02/16/1993	Rohen			
		US-5,188,145	02/23/1993	Mathieu			
		US-5,195,894	03/23/1993	Le Blanc et al.			
		US-5,197,418	05/30/1993	Wissmann et al.			
		US-5,209,584	05/11/1993	Galarneau			
		US-5,226,817	07/13/1993	Nakajima et al.			
		US-5,286,199	02/15/1994	Kipke			
		US-5,293,464	03/08/1994	Hirano et al.			
		US-5,426,837	06/27/1995	Tieman			

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Initials*	No.¹	Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>6</sup> (if known)	MM-DD-YYYY	Document	Figures Appear	Ľ
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Substituto	for form 1449A/F	OTO.		Complete if Known			
Substitute	101 101111 1449201	-10		Application Number	10/748,742		
	ORMATION	_		Filing Date	December 30, 2003		
STATEMENT BY APPLICANT			PLICANT	First Named Inventor	David A. Schleppenbach		
		4		Group Art Unit	3713		
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Sheet	4	of	5	Attornev Docket Number	7024-538		

U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Document Number Number-Kind Code <sup>2</sup> (If known)	Publication Date MM-DD-YYYY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear			
		US-5,453,012	09/26/1995	Hudecek				
		US-5,496,174	03/05/1996	Garner				
		US-5,502,965	04/02/1996	Hornhauer et al.				
		US-5,510,598	04/23/1996	Kawam et al.				
		US-5,574,830	11/12/1996	Quzilleau				
		US-5,580,251	12/03/1996	Gilkes et al.				
		US-5,583,478	12/10/1996	Renzi				
		US-5,588,295	12/31/1996	Brotz				
		US-5,629,662	05/13/1997	Floyd et al.				
		US-5,685,721	11/11/1997	Decker				
		US-5,718,588	.02/17/1998	Tretiakoff et al.				
		US-6,022,220	02/08/2000	Haugen				
		US-6,085,871	07/.11/2000	Karamata .				

Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or Application of Cited	Pages, Columns, Lines, Where Relevant Passages or Relevant	T <sup>4</sup>
Initials*	No.1	Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>6</sup> (if known)	MM-DD-YYYY	Document	Figures Appear	<u> </u>
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Substitute for form 1449B/PTO				Complete if Known			
				Application Number	10/748,742		
INFORMATION DISCLOSURE				Filing Date	December 30, 2003		
STATEMENT BY APPLICANT			PLICANT	First Named Inventor	David A. Schleppenbach		
(use as many sheets as necessary)				Group Art Unit	3713		
				Examiner Name			
Sheet	5	of	5	Attorney Docket Number	7024-538		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	=
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-Issue number(s) publisher city and/or country where published	
		Haptic: A Haptic Tactile Display for the Presentation of Two-Dimensional Virtual or Remote Environments, AL/CF-TR-1995-0104, March 1995, Report of Defense Technical Information Center, Ft. Belvoir, Virginia.	
		NIH Grant Number 2 R44 EY06512-02, Final Report, "Electronic Braille Output Device Using Nitinol, Submitted by TiNi Alloy Co., Oakland, CA, February 9, 1990.	
		Patent Abstracts of Japan, Vol. 1999, No. 12, 29 October 1999 (1999-10-29) JP 11 184369 A (Mitsubishi Cable Ind. Ltd.), 9 July 1999 (1999-7-9) translated.	
		Patent Abstracts of Japan, Vol. 1995, No. 08, 29 September 1995 (1995-9-29) JP 07 119619 A (Ricoh Co. Ltd.), 9 May 1995 (1995-5-9) translated.	
		Patent Abstracts of Japan, Vol. 007, No. 089 (M207), 13 April 1983 (1983-4-13) JP 58 013242 A (Sharp KK), 25 January 1983 (1983-1-25) <i>translated</i> .	I
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